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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,243	10/25/2004	Kiyotaka Uchimoto	4035-0169PUS1	8938
2292 7590 05/03/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER LUDWIG, MATTHEW J	
			ART UNIT	PAPER NUMBER
			2178	
			NOTIFICATION DATE	DELIVERY MODE
			05/03/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/500,243

Applicant(s)

UCHIMOTO ET AL.

Examiner

Matthew J. Ludwig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/17/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the amendment filed on February 5, 2007.
2. Claims 1, 4-7, 10-15 are currently pending. Claims 1 and 7 are independent claims.
3. Claims 1-4 and 7-10 rejected under 35 U.S.C. 102(b) as being anticipated by Abe have been withdrawn pursuant to applicant's amendment. Claims 5, 6, and 11-13, objected to as being improper because the claims were dependent upon multiple dependent claims have been removed pursuant to applicant's amendment. The first office action, mailed 10/5/2006, failed to reject claims 5, 6, and 11-13, on the merits. Therefore, this office action is being made non-final.

Claim Objections

4. Claims 14 and 15 are objected to because of the following informalities: The claims recite the phrase 'based on the word order model by *apply* the statistical technique'. The examiner believes the claim should read as follows, 'based on the word order model by *applying* the statistical technique'. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 5 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

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In reference to dependent claims 5 and 11, the limitations seem to be directed toward word insertion, however, the removal of a word as a keyword is unclear to the Examiner as presently claimed within the limitation. The vexatious nature of the claim language provides the Examiner with a blurred idea of the invention when the dependent claim is read as a whole. An example of such language within the dependent claim is the phrase ‘a word to be inserted, or then removing’. The words ‘or then’ fail to accurately describe how the removal takes places within the dependent claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1, 4-7, 10-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al., USPN 5,473,705 filed (3/9/1993).**

In reference to independent claim 1, Abe discloses:

A text generation method for generation method for generating a text including a sentence (see Title and Abstract: Abe discloses a system and method that recognizes words and supplements omitted words to thereby generated a spoken language), *comprising:*

an input step for inputting at least a word as a keyword (see Figs. 1, 2; col. 5 lines 9-12:

Abe teaches inputting sign data keywords),

an extracting step for extracting, from a database, a text or a phrase related to the keyword (see col. 5 lines 13-18 and Figs. 4 and 5: Dependence relationships are analyzed and extracted using the analysis table, word dictionary, analysis stack area, and case dictionary), *and a text generation step for generating an optimum text based on the input keyword by combining the extracted text or phrase* (see col. 5 lines 19-26 and Fig. 6: The optimum estimated omitted words supplement the keywords to generate a complete sentence.

The reference to Abe discloses a program for recognizing a train of words from the input sign data, a program for analyzing dependency relationship between words (compare to “*morphologically analyzing and parsing the extracted text to obtain a dependency structure of the text*”), and a program for supplementing omitted words in and between words having the dependency relation to generate a sentence. Furthermore, the depended word and dependence relationship of each matched word are analyzed and entered in the dependent word field and dependence relationship field of the analysis table. See column 3, lines 45-67; column 7, 10-67; column 8, lines 1-67. Finally, the reference Abe discloses in the course of generating the dependency structure containing the keyword in the text generation step, determining the probability of dependency of the entire text using a dependency model, wherein generating a text having a maximum probability as an optimum text (see col. 7 lines 65-67 *et seq.*: The most probable dependence relationship of a plurality of candidates is the optimum text). The reference fails to explicitly state text having ‘maximum probability’, however, the reference does mention the use of rules and a way to calculate the best expression or text. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the well-

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known dependency analysis and analysis rules taught by Abe and provided this analysis and ultimately producing a probability of optimum text based upon words input to the processor.

In reference to dependent claim 4, Abe discloses wherein in the middle of or after the generation of the dependency structure in the text generation step, generating an optimum text having a natural word order based on a word order model (see col. 7 line 29 through col. 9 line 11).

In reference to dependent claim 5, Abe teaches:

Programs include a program for recognizing a train a words from the input sign data, a program for analyzing dependency relationship between words, and a program for supplementing omitted words in and between words having the dependency relation to generate a sentence. See column 3, lines 43-55; column 7, lines 10-56.

In reference to dependent claim 6, Abe teaches:

If the dependence relationship is ambiguous and cannot be analyzed definitely, the most probable one may be selected or a plurality of candidates may be used at the later processes. The entries on the analysis stack area whose dependence relationship have been determined, are cleared with only the verb being left uncleared, the remaining words of the train are set on the analysis stack to further continue the dependence analysis. See column 8, lines 1-45.

In reference to independent claim 7 incorporates substantially similar subject matter as independent claim 1, and is rejected along the same rationale.

In reference to dependent claim 10, 11, 12, 13, and 15, incorporates substantially similar subject matter as claim 4, 5, 6, and 14. Therefore, the claims are rejected along the same rationale.

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In reference to dependent claim 14, Abe teaches:

Abe discloses wherein in the middle of or after the generation of the dependency structure in the text generation step, generating an optimum text having a natural word order based on a word order model (see col. 7 line 29 through col. 9 line 11).

Response to Arguments

9. Applicant's arguments with respect to claims 1, 4-7, and 10-15, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

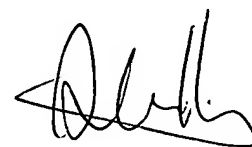
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML

A handwritten signature in black ink, appearing to read 'S. Hong', with a stylized, looped flourish at the end.

STEPHEN HONG
SUPERVISORY PATENT EXAMINER